

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

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In the Matter of )

Iowa Telecommunications Services, Inc. )  
Tariff FCC No. 1, Transmittal No. 31 )

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WC Docket No. 03-135

**REBUTTAL OF IOWA TELECOMMUNICATIONS SERVICES, INC.  
D/B/A IOWA TELECOM**

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Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom (“Iowa Telecom”), pursuant to the June 11, 2003 Order Designating Issues for Investigation (“*Designation Order*”),<sup>1</sup> hereby files its rebuttal to the oppositions filed by AT&T Corp. (“AT&T”) and Sprint Corporation (“Sprint”) in the above-referenced matter.

**I. INTRODUCTION AND SUMMARY**

The comments of the two interexchange carrier (“IXC”) opponents fail to provide any basis for the Commission to reject or modify the forward-looking economic cost (“FLEC”) average traffic sensitive (“ATS”) target rate of 1.4060 cents per minute submitted by Iowa Telecom in its Direct Case. However, as discussed in this Rebuttal, AT&T has identified two minor mathematical adjustments that are appropriate.<sup>2</sup> Incorporating these two adjustments would increase the ATS target rate increases to 1.4297 cents per minute.

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<sup>1</sup> Iowa Telecommunications Service, Inc. Tariff FCC No. 1, Transmittal No. 31, WC Docket No. 03-135, Order Designating Issues for Investigation, DA 03-1919 (rel. June 11, 2003) (“*Designation Order*”).

<sup>2</sup> See *infra* Section IV.C.5.

Significantly, many aspects of Iowa Telecom's cost study have not been challenged by either AT&T or Sprint. With the exception of Iowa Telecom's plan to route its tandem traffic through its own tandems,<sup>3</sup> neither AT&T nor Sprint disputes any of the core features of Iowa Telecom's network design. The list of undisputed features is significant: the number of host and remote switches; the type of host or remote switch proposed for each location; the use of remote switches instead of digital loop carrier; the number and location of transport rings; and the capacity of fiber cable and terminals.<sup>4</sup> In fact, Sprint does not challenge a single aspect of Iowa Telecom's network design, or any aspect of its forward-looking switching or transport facilities. Nor does it criticize any aspect of Iowa Telecom's cost study. Only AT&T raises any objections to the cost study.<sup>5</sup>

AT&T has revealed its true colors in this tariff proceeding by flip flopping on issues and exaggerating claims in an effort to deprive Iowa Telecom of adequate cost compensation. It fails to acknowledge the facts: Iowa Telecom has submitted a FLEC study that justifies its new ATS target rate in accordance with the Commission's Total Element Long Run Incremental Cost ("TELRIC") rules and *Forbearance Order*.<sup>6</sup> After arguing for months during the forbearance proceeding that Iowa Telecom should not be permitted to rely on the Commission's Synthesis

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<sup>3</sup> AT&T disputes this aspect of the cost study. See AT&T Opposition at 8. Iowa Telecom refutes AT&T's argument *infra* at pp. 17-19.

<sup>4</sup> On this last point, AT&T argues only by "implication" that OC-48 capacity is not justified for all of Iowa Telecom's planned OC-48 rings. See AT&T Opposition at 25. No such implication is justified. See *infra* Section IV.C.1.

<sup>5</sup> MCI/WorldCom requested and received copies of all of Iowa Telecom's confidential filings in this proceeding but chose not to file any opposition.

<sup>6</sup> Petition for Forbearance of Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom Pursuant to 47 U.S.C. § 160(c) from the Deadline for Price Cap Carriers to Elect Interstate Access Rates Based on the CALLS Order or a Forward Looking Cost Study, CC Docket No. 01-331, Order, 17 FCC Rcd 24327 (2002) ("*Forbearance Order*").

Model to establish its FLEC ATS target rate, and after insisting that Iowa Telecom make numerous changes to the default inputs to the Synthesis Model to reflect its unique circumstances in Iowa, AT&T now asserts that Iowa Telecom's cost study is flawed because it uses company specific inputs rather than default values in the Synthesis Model. This complete reversal in position shows just how non-persuasive AT&T's arguments are.

Stripped of its rhetoric, AT&T's Opposition raises no substantiated objection to Iowa Telecom's cost study. Instead, it presents inaccurate and misguided arguments that utterly fail to recognize the fact that Iowa Telecom's cost study reflects the forward-looking costs of a carrier serving exchanges scattered throughout rural Iowa, not a large Regional Bell Operating Company ("RBOC") serving a more densely populated customer base. AT&T's claims that Iowa Telecom has priced an "oversized" or "bloated" network fails to take into account the economics of smaller telephone companies, which are significantly different from the cost characteristics of the large RBOCs. This proceeding apparently represents the first time a forward-looking TELRIC cost study has been used to set costs for a rural carrier in any forum. Although AT&T's arguments may be appropriate in an RBOC proceeding, they are certainly inappropriate in this case.

AT&T's arguments also are flawed in other respects. For example, a number of its assertions are mutually inconsistent. AT&T complains that the cost study and cost calculator present a "black box"<sup>7</sup> that it is beyond comprehension, yet it proposes several "corrections" to specific formulae contained in individual cells of Iowa Telecom's spreadsheets.<sup>8</sup> The granularity

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<sup>7</sup> *Id.* at 2.

<sup>8</sup> *See id.* at 27-28.

of the corrections AT&T offers refutes its “black box” claim. As another example, AT&T complains that Iowa Telecom has submitted more cost support information than it has had time to review in twelve days, including “hundreds of pages of electronic documents.”<sup>9</sup> This assertion is entirely inconsistent with the claim elsewhere in AT&T’s Opposition that the cost study is “virtually undocumented.”<sup>10</sup> It should also be noted that AT&T has had far longer than the twelve days it claims to review and analyze Iowa Telecom’s cost study and the associated cost calculator spreadsheet. Iowa Telecom initially filed the cost study and cost calculator on March 25, 2003 and AT&T has had these documents since March 27, 2003, *i.e.*, for almost four months.<sup>11</sup> AT&T has had plenty of time, therefore, to analyze the cost calculator and to comprehend its operation.<sup>12</sup> While many of AT&T’s arguments are meritless on their face, Iowa Telecom responds to, and refutes, each of AT&T’s claims in this Rebuttal.<sup>13</sup>

Sprint’s Opposition is substantially shorter but no more meritorious. It raises only one argument, asserting that Iowa Telecom’s tariff rates are based on a methodology that “is contrary

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<sup>9</sup> AT&T Opposition at 6 n.7.

<sup>10</sup> *Id.* at 33. Notably, AT&T has submitted its own “corrections” to the cost study without providing any documentation whatsoever that would enable its calculations to be subjected to scrutiny. *See infra* Section V. Applying AT&T’s own criterion that proposed adjustments must be “fully documented,” AT&T Opposition at 7, AT&T’s “corrections” must be rejected as lacking sufficient support to merit consideration.

<sup>11</sup> Iowa Telecom received AT&T’s request for these confidential documents on March 27. Subsequently, Iowa Telecom provided AT&T with confidential versions of its May 1 and May 19, 2003 revisions to the cost calculator.

<sup>12</sup> In response to requests by staff of the Wireline Competition Bureau, Iowa Telecom filed numerous work papers supporting its cost calculator on May 19 and a 29-page description of those work papers on May 30, 2003. These filings were distributed promptly to AT&T (and Sprint) upon request.

<sup>13</sup> AT&T states that Iowa Telecom earned a rate of return in excess of 11.25% in 2002. *See* AT&T Opposition at 7. This embedded cost argument is irrelevant to a price cap carrier or to a FLEC study.

to the structure the Commission established in the *CALLS Order*.”<sup>14</sup> This argument fails to recognize that in the *Forbearance Order* the Commission crafted specific relief for Iowa Telecom that is distinct from the FLEC option described in the *CALLS Order*. Instead of allowing Iowa Telecom to elect the FLEC option in CALLS, which would have required the Commission to “set all of Iowa Telecom’s rates at forward-looking cost and determine an appropriate X-factor for Iowa Telecom,”<sup>15</sup> the Commission decided to allow Iowa Telecom simply “to reset its ATS target rate”<sup>16</sup> at FLEC. Sprint’s argument entirely misreads the relief granted by the Commission in the *Forbearance Order* and is thus simply incorrect.

In summary, aside from two minor mathematical corrections identified by AT&T, none of the arguments raised in the two oppositions has any merit. In accordance with the *Forbearance Order*, Iowa Telecom’s Direct Case presents a forward-looking cost study and supporting documentation that are fully consistent with the Commission’s TELRIC methodology. After incorporating the two mathematical adjustments proposed by AT&T,<sup>17</sup> the Commission should approve a FLEC-based ATS target rate of 1.4297 cents per minute to apply from April 9, 2003 through the end of the CALLS agreement on July 1, 2005 or until such later time that the Commission extends the end date for the CALLS rules, if any. If the Commission were to consider adopting any additional corrections to the ATS target rate, it should take an even-handed approach that includes appropriate adjustments that raise the rate.

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<sup>14</sup> Opposition of Sprint Coporation [sic] to Direct Case, WC Docket No. 03-135, July 14, 2003, at 3 (“Sprint Opposition”).

<sup>15</sup> *Forbearance Order* at ¶ 22.

<sup>16</sup> *Id.* at ¶ 23.

<sup>17</sup> *See infra* Section IV.C.5.



## **II. AT&T'S RELIANCE UPON SYNTHESIS MODEL DEFAULT VALUES REFLECTS A FLIP FLOP FROM THE POSITION IT TOOK DURING THE FORBEARANCE PROCEEDING**

AT&T has now flip-flopped on its position regarding the use of Synthesis Model data to determine Iowa Telecom's FLEC ATS target rate. Last year, after Iowa Telecom demonstrated that the Synthesis Model produces a forward-looking ATS target rate exceeding three cents per minute,<sup>18</sup> AT&T argued that Iowa Telecom could not use the Commission's default Synthesis Model because the default inputs lead to inappropriate results for rural carriers.<sup>19</sup> AT&T explained that "the Commission developed its [Synthesis Model] data primarily to represent nonrural networks. Such networks average about 14,000 lines per wire center. In contrast, [Iowa Telecom] averages about 900 lines per wire center."<sup>20</sup> AT&T also noted that the Rural Task Force, of which AT&T was a member, had released a white paper concluding that the Synthesis Model's default inputs for "line counts and types, wire center service areas and types, traffic patterns, engineering practices, equipment costs, etc." would need "extensive" updating before they could be applied to rural carriers.<sup>21</sup> AT&T clearly asserted that the Synthesis

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<sup>18</sup> See Iowa Telecom Emergency Petition for Forbearance, CC Docket No. 01-331, Nov. 26, 2001, at 30 ("Iowa Telecom Petition") (showing that the default Synthesis Model produces ATS rates of 3.2093 and 3.0517 cents per minute for the Iowa Telecom Systems Service Group (ITIT) and Iowa Telecom Service Group (ITNO) tariff entities, respectively).

<sup>19</sup> See Letter from Richard N. Clarke, AT&T, to William F. Caton, FCC, CC Docket No. 01-331, Mar. 27, 2002, at 2-5 ("AT&T March 27, 2002 ex parte").

<sup>20</sup> *Id.* at 3.

<sup>21</sup> *Id.* at 2-3 (citing *A Review of the FCC's Non-Rural Universal Service Fund Method and the Synthesis Model for Rural Telephone Companies*, Rural Task Force White Paper 4, Appendix E, Sept. 2000). Furthermore, AT&T stated that Iowa Telecom would need to ask the Commission to require all rural carriers to file "comprehensive up-to-date data on their customer locations, line counts and types, engineering practices, input costs, traffic patterns, operating and overhead expenses and miscellaneous other information" to populate the Synthesis Model with data appropriate to determine rural carriers' forward-looking costs. *Id.* at 7.

Model's default input values, which were developed from non-rural local exchange carrier ("LEC") data, were inappropriate in setting forward-looking access costs for rural carriers.

Moreover, AT&T demanded that Iowa Telecom modify the default Synthesis Model to reflect Iowa Telecom's specific circumstances, including modifications to switch investment inputs, tandem switch assignments, host/remote configuration, and traffic patterns.<sup>22</sup> Iowa Telecom responded by making numerous adjustments to the Synthesis Model to reflect the particular characteristics of Iowa Telecom's network.<sup>23</sup> This effort was undertaken at great expense to the company. After months of effort to incorporate a multitude of adjustments and company-specific input values, the end result was a customized version of the Synthesis Model that produced a FLEC ATS target rate of approximately 1.8 cents per minute.<sup>24</sup> In the *Forbearance Order*, however, the Commission rejected use of the Synthesis Model to set Iowa Telecom's ATS target rate.<sup>25</sup>

In a complete reversal of its position during the forbearance proceeding, AT&T now asserts that individual default Synthesis Model input values should be used instead of the Iowa specific input data that are utilized in the cost study. AT&T asserts, for example, that Iowa Telecom's inclusion of ■ spare capacity for switches should be rejected because it exceeds the Synthesis Model's default value of 6%.<sup>26</sup> It claims that Iowa Telecom should have used the

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<sup>22</sup> See *id.* at 3-6.

<sup>23</sup> See Letter from Gregory J. Vogt to Marlene H. Dortch, CC Docket No. 01-331, July 2, 2002, at 2-8; Letter from Gregory J. Vogt to Marlene H. Dortch, Sept. 23, 2002, at 1-3 ("Iowa Telecom September 23 ex parte").

<sup>24</sup> See Iowa Telecom September 23 ex parte at 1.

<sup>25</sup> *Forbearance Order* at ¶ 20 n.60.

<sup>26</sup> See AT&T Opposition at 14.

default value for the percentage of shared interoffice structures.<sup>27</sup> In addition, it asserts that Iowa Telecom's cost study assumes too many trunks based on a comparison between the company's monthly average usage per trunk and the default value from the Synthesis Model.<sup>28</sup>

To make matters worse, AT&T now cites to Synthesis Model default values only when they would lower Iowa Telecom's ATS target rate, not when they would push the rate higher. For example, Iowa Telecom's cost study uses the company's actual cost per fiber mile rather than the much higher Synthesis Model default value. The cost study also utilizes the company's planned fiber route miles instead of the considerably higher number of route miles generated by the model. Both of these company-specific factors act to lower Iowa Telecom's ATS target rate. If the Commission were to now agree to use the Synthesis Model default values, it cannot pick and choose only certain ones that AT&T has selected in its Opposition to manipulate the results.

Iowa Telecom has developed a detailed and thorough FLEC cost study that determines the company's forward-looking ATS rate based on its unique circumstances, which is exactly what AT&T sought during the forbearance proceeding. The Commission should not allow AT&T to steer it into making a U-turn at the eleventh hour.

### **III. AT&T'S ARGUMENTS FAIL TO RECOGNIZE THAT IOWA TELECOM IS A RURAL CARRIER THAT OPERATES UNDER CIRCUMSTANCES QUITE DIFFERENT FROM THOSE OF THE LARGE RBOCS**

Throughout its Opposition, AT&T's arguments fail to acknowledge that rural carriers have different cost characteristics than RBOCs. This lack of recognition of any distinction

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<sup>27</sup> See *id.* at 31, 37 n.35.

<sup>28</sup> See *id.* at 10 n.10.

between non-rural and rural carriers is most evident with respect to AT&T's allegations that Iowa Telecom's network includes too much capacity. All of AT&T's overcapacity arguments are simply off base in the context of a rural carrier, where most of the exchanges are serving a few hundred, not tens of thousands, of access lines.

The Commission has recognized on several occasions that rural carriers experience significantly higher costs than non-rural carriers. In 2001, the Commission observed that rural carriers "generally have higher operating and equipment costs" than non-rural carriers, due to "lower subscriber density, smaller exchanges, and a lack of economies of scale."<sup>29</sup> Furthermore, it recognized this same point in the particular context of access charges when it created a rural exemption for competitive LECs ("CLECs") operating in rural areas. The Commission acknowledged that CLECs experience much higher costs "when serving a rural area with a diffuse customer base than they do when serving a more concentrated urban or suburban area."<sup>30</sup> Thus, "a higher level of access charges is justified for certain CLECs serving truly rural areas."<sup>31</sup> Of course, the same economic factors – lower subscriber density, smaller exchanges, and a lack of economies of scale – apply to rural ILECs too, and to Iowa Telecom in particular.

The Commission is also familiar with some of the key differences in the operating parameters facing rural and non-rural carriers. In 1998, the Federal-State Joint Board on Universal Service appointed a Rural Task Force, which included AT&T among its members, to study the differences between rural and urban carriers. The Rural Task Force issued a number of

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<sup>29</sup> Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Fourteenth Report and Order, Twenty-Second Order on Reconsideration, 16 FCC Rcd 11244, ¶ 5 (2001).

<sup>30</sup> Access Charge Reform, CC Docket No. 96-262, Seventh Report and Order, 16 FCC Rcd 9923, ¶ 66 (2001).

<sup>31</sup> *Id.* at ¶ 3.

white papers on various issues affecting rural carriers, but its second White Paper, entitled “The Rural Difference,”<sup>32</sup> focused on the distinct cost characteristics that this group of LECs face. Among other points, the White Paper noted that rural carriers serve far fewer lines per local switch (on average about 1,250 lines) than non-rural carriers (7,188 lines).<sup>33</sup> Iowa Telecom’s exchanges, on average, are even smaller than this rural carrier average – Iowa Telecom’s 294 exchanges average fewer than 900 working lines per switch. The Rural Task Force determined that the average rural carrier central office switching and transmission investments are 50% higher per loop than for non-rural carriers.<sup>34</sup> Because Iowa Telecom is smaller than the average rural carrier, it should be expected that its costs are higher than the average rural carrier. In addition, the Rural Task Force observed that rural carriers have a smaller percentage of local calling than non-rural carriers, serve areas with low population densities, lower income populations, and fewer business and high-volume customers, and face substantially higher plant specific and operations costs.

For example, AT&T asserts that “Iowa Telecom’s network deploys so much capacity that the average monthly usage per trunk would be only [REDACTED] minutes,” below the Synthesis Model’s default value of 10,044 minutes.<sup>35</sup> Aside from the fact that the number AT&T assumes for Iowa Telecom is flat wrong,<sup>36</sup> it is incorrect to compare this data point for Iowa Telecom, a rural carrier, with the default value established by the Commission for non-rural LECs, based largely

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<sup>32</sup> *The Rural Difference*, Rural Task Force White Paper 2, Jan. 2000, at <http://www.wutc.wa.gov.rtf>.

<sup>33</sup> *See id.* at 44.

<sup>34</sup> *See id.* at 49-52.

<sup>35</sup> AT&T Opposition at 10.

<sup>36</sup> *See infra* Section IV.B.1.

on RBOC data. One would reasonably expect Iowa Telecom's average monthly usage per trunk to be significantly lower than that of an RBOC because the volume of traffic between the rural exchanges Iowa Telecom serves is far smaller than traffic volumes between the exchanges of larger carriers.

AT&T also claims that the effective ratio of [REDACTED] lines per trunk in Iowa Telecom's network reflects trunk utilization that is below industry standards and thus is not forward-looking.<sup>37</sup> The obvious flaw in this argument is that AT&T reaches this conclusion by comparing Iowa Telecom's line per trunk ratio with Telcordia data showing line per trunk ratios for considerably larger switches. About one-third of Iowa Telecom's exchanges have 300 or fewer working lines, and more than 80% of its exchanges are below the 1,000-line threshold that represents the low end for the Telcordia switch data.<sup>38</sup> In the cost study, Iowa Telecom generally uses Nortel STAR remote switches in its smallest exchanges. In the smallest of these offices, the lines per trunk ratio will often range from [REDACTED] to [REDACTED].<sup>39</sup> This is an inherent characteristic of very small offices that cannot be avoided because, even for the smallest switches, a minimum number of DS-1 circuits (usually four) and plug-in cards need to be installed, with some limited amount of redundancy in case of equipment failure. This is one reason why rural carrier switching costs are higher than urban carrier costs. Given the difference in the size of exchanges between Iowa Telecom and the Telcordia study, it is not surprising that

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<sup>37</sup> See AT&T Opposition at 12.

<sup>38</sup> See Confidential Exhibit 2a, tab "Lines by Exchange," column D. All confidential exhibits cited in this Rebuttal refer to the confidential exhibits to Iowa Telecom's Direct Case.

<sup>39</sup> In the larger STAR and RSCS remote locations, Iowa Telecom will [REDACTED] [REDACTED] cited by AT&T.

Iowa Telecom has fewer lines per trunk, on average, than the typical non-rural LEC, and it is certainly not reflective of any lack of efficiency in network design.

As another example, based on reverse engineering using “industry capacity assumptions,” AT&T asserts that Iowa Telecom’s “trunk capacity per line” is high,<sup>40</sup> by which it appears to mean that Iowa Telecom has designed more capacity than is necessary. This argument suffers from the same flaw – AT&T’s assumptions fail to recognize that Iowa Telecom is a rural carrier. The explanation for Iowa Telecom’s higher number of trunks per line is that Iowa Telecom’s typical office is far smaller than the average non-rural LEC, therefore Iowa Telecom typically has far fewer lines per trunk than the average non-rural LEC.

All of these arguments are unavailing because carriers serving very rural areas simply face different cost characteristics than non-rural LECs.<sup>41</sup> In the forbearance proceeding, AT&T acknowledged this point when it argued that the Synthesis Model developed for non-rural carriers should not be used to calculate the FLEC ATS target rate for rural carriers such as Iowa Telecom.<sup>42</sup> In this tariff proceeding, however, AT&T has reversed course and is trying to measure Iowa Telecom’s cost study capacity assumptions against irrelevant data derived from non-rural LECs.

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<sup>40</sup> AT&T Opposition at 11

<sup>41</sup> *See, e.g.*, Iowa Telecom Petition at 2-3, 7-9.

<sup>42</sup> *See* AT&T March 27, 2002 ex parte at 2-5.

**IV. FEW OF THE ARGUMENTS RAISED BY AT&T REGARDING THE COST STUDY HAVE ANY MERIT; THOSE THAT DO JUSTIFY AN INCREASE IN THE ATS RATE**

**A. Network Design**

Iowa Telecom's proposed network represents a forward-looking design. In fact, as Professor Shelanski has noted, the cost study is actually quite aggressive because it "assumes that forward-looking technology is used to fully replace switching and interoffice transport equipment throughout Iowa Telecom's network, and therefore estimates costs based on a much more advanced network than Iowa will actually have physically in place during the study period."<sup>43</sup> By assuming full replacement of all switches and transport facilities at a considerably faster rate than the company will be able to replace its existing technology, the cost study thus understates Iowa Telecom's true forward-looking costs.

AT&T offers only a few shallow and unsupported arguments to counter Iowa Telecom's justification for its TELRIC network design in various filings in this proceeding, which includes Professor Shelanski's affidavit and the accompanying cost study, the affidavit of Dennis Kilburg, Iowa Telecom's Vice President of Engineering, and the Direct Case itself. AT&T challenges the adequacy of Iowa Telecom's explanation of alternative network designs, asserting that Iowa Telecom has adopted a "just trust us" approach.<sup>44</sup> This assertion is belied by the thoroughness of Iowa Telecom's responses to the *Designation Order* in its Direct Case. Iowa Telecom did in fact consider numerous alternatives to the forward-looking network that forms the basis for its cost study. Among other design alternatives, Iowa Telecom considered: alternative switching and

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<sup>43</sup> Affidavit of Professor Howard Shelanski, Mar. 25, 2003, at 5 ("Shelanski Affidavit").

<sup>44</sup> AT&T Opposition at 8.



host/remote configurations; replacement of remote switches with digital loop carrier; alternative numbers of fiber transport rings; changes to the number and location of its existing tandem switches; and whether to build its own fiber capacity, jointly build transport facilities with other carriers, or lease facilities.<sup>45</sup> Significantly, AT&T does not specifically respond to these portions of Iowa Telecom's Direct Case. Furthermore, with only two exceptions discussed below, AT&T does not dispute that Iowa Telecom's network design is compliant with TELRIC.

AT&T challenges two aspects of Iowa Telecom's TELRIC network design. First, it asserts that Iowa Telecom's host/remote configuration violates TELRIC because traffic is not routed to the nearest host for all remote switches.<sup>46</sup> Second, it asserts that TELRIC requires Iowa Telecom to route tandem traffic to Qwest's tandems.<sup>47</sup> Notably, Iowa Telecom refuted each of these two arguments in the Direct Case<sup>48</sup> and AT&T provides no rebuttal to any of the arguments Iowa Telecom presented.

AT&T's claim that a network design incorporating Iowa Telecom's existing host/remote configuration violates TELRIC fails to recognize that a TELRIC study should reflect how a carrier will deploy its network in the future. As Professor Shelanski explained in his affidavit in this proceeding:

The reference in the Commission's rules to "use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers" should be interpreted to

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<sup>45</sup> Direct Case of Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom, WC Docket No. 03-135, July 2, 2003, at 14-15, 17-19, 35-37 ("Direct Case").

<sup>46</sup> See AT&T Opposition at 9.

<sup>47</sup> See *id.* at 8.

<sup>48</sup> See Direct Case at 10-12, 15-16, 26-31.

account for *how* the ILEC in question efficiently deploys new technology over time as well as *what* it deploys in its network, given that it is not in fact starting from scratch. The Commission itself has recognized in the *Local Competition Order* that “[w]ith respect to prices developed under the forward-looking, cost-based pricing methodology, we conclude that incumbent LECs’ rates for interconnection and unbundled elements *must recover costs in a manner that reflects the way they are incurred.*” Thus, the most economically correct way to interpret the Commission’s rules is to assume the network is reconstructed *over time* to minimize costs.<sup>49</sup>

Iowa Telecom has developed, and has begun to implement, a seven-year Network Improvement Plan.<sup>50</sup> Under this plan, by 2010 the company would be able to reduce the number of host switches in its network to 10.<sup>51</sup> However, all of Iowa Telecom’s 83 current stand-alone and host switches will remain in service throughout the entire two-year period that Iowa Telecom’s FLEC ATS target rate rates will be in effect.<sup>52</sup> Accordingly, the forward-looking cost study is appropriately based on the forward-looking replacement cost of the host/remote configuration that will be in place throughout the entire study period.<sup>53</sup>

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<sup>49</sup> Shelanski Affidavit at 5 (citing Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499 at ¶ 622 (“*Local Competition Order*”).

<sup>50</sup> See Letter from Gregory J. Vogt to Marlene H. Dortch, CC Docket No. 01-331, Aug. 1, 2002, Exhibit A (“Iowa Telecom August 1 ex parte”). Surprisingly, AT&T questions the existence of this Plan. See AT&T Opposition at 8. It is, however, a matter of public record – an overview of the Plan and all non-confidential exhibits were filed in Iowa Telecom’s forbearance proceeding and are available on ECFS. See Iowa Telecom August 1 ex parte, Exhibit A. AT&T was an active participant in that proceeding.

<sup>51</sup> See Iowa Telecom August 1 ex parte, Exhibit A at 3; Direct Case at 19.

<sup>52</sup> See Direct Case at 15.

<sup>53</sup> Iowa Telecom has shown that an adjustment to include the host/remote reconfiguration that Iowa Telecom plans to complete by 2010 would increase the ATS target rate to 1.5164 cents per minute. See Direct Case at 13-14; Confidential Exhibit 3a (excluding the two mathematical corrections described *infra*).

As Iowa Telecom stated in its Direct Case, this FLEC approach is entirely consistent with the Commission's interpretation of TELRIC in the *Local Competition Order*.<sup>54</sup> In that order, the Commission explicitly stated that the TELRIC methodology reflects an ILEC's "existing network design": "This benchmark of forward-looking cost and existing network design most closely represents the incremental costs that incumbents actually expect to incur in making network elements available to new entrants."<sup>55</sup> AT&T has provided no rebuttal to this argument, even though Iowa Telecom first raised this issue in its March 25, 2003 submission in this proceeding and raised it again in its Direct Case.<sup>56</sup>

Other features of Iowa Telecom's cost study demonstrate that it complies with the Commission's TELRIC methodology. As explained by Professor Shelanski,

[T]he study assumes that forward-looking technology is used to fully replace switching and interoffice transport equipment throughout Iowa Telecom's network, and therefore estimates costs based on a much more advanced network than Iowa will actually have physically in place during the study period. In this way the cost study is aggressively forward-looking in its effort to be TELRIC-compliant and factors in efficiencies that the carrier does not yet enjoy in its day-to-day network operations.<sup>57</sup>

The cost study thus assumes that every single switch has been replaced at current replacement costs, even though it will take Iowa Telecom considerably more than two years to implement these replacements. Furthermore, the efficiency of Iowa Telecom's planned network is confirmed by the fact that the Synthesis Model produces a higher FLEC ATS target rate of

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<sup>54</sup> See *id.* at 15-16.

<sup>55</sup> *Local Competition Order* at ¶ 685; see also Shelanski Affidavit at 4.

<sup>56</sup> See Shelanski Affidavit at 4; Direct Case at 15-16.

<sup>57</sup> Shelanski Affidavit at 5.

approximately 1.8 cents per minute, even after incorporating all of the modifications requested by the Bureau staff to tailor the model's inputs to reflect the company's specific network characteristics.<sup>58</sup>

AT&T's second challenge to Iowa Telecom's planned network asserts that the cost study should route traffic to Qwest's tandems because such a design "would be less expensive."<sup>59</sup> Iowa Telecom has rebutted this argument now on two occasions.<sup>60</sup> AT&T's argument is based on a comparison of the FLEC rates for tandem switching. However, as Iowa Telecom has previously explained, that is not the appropriate or correct economic comparison:

It is important to note that the relevant economic comparison to determine the appropriate design of Iowa Telecom's forward-looking network is between (a) the forward-looking incremental cost of adding tandem functionality to selected host switches in the company's forward-looking network, and (b) the price of tandem switching charged by Qwest. Thus, comparing Iowa Telecom's forward-looking economic cost ("FLEC") for tandem switching with that of Qwest would be inappropriate and contrary to economic principles. Excluding issues such as differences in service quality and network control, economic efficiency is determined based on whether the *incremental* costs of one option are lower than the *incremental* costs of using another option. Applying the correct economic test, the forward-looking incremental cost of adding tandem functionality to selected Iowa Telecom host switches is less than the price of tandem switching charged by Qwest.<sup>61</sup>

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<sup>58</sup> See Iowa Telecom September 23 ex parte. Iowa Telecom notes that re-homing its remotes to the closest host in the 2005 network would result in less than a 2% reduction in the ATS target rate, hardly a "significant decline" that AT&T claims. AT&T Opposition at 9.

<sup>59</sup> AT&T Opposition at 8.

<sup>60</sup> See Letter from Gregory J. Vogt to Aaron Goldschmidt, May 19, 2003, at 4-7 ("Iowa Telecom May 19 Letter"); Direct Case at 30-31.

<sup>61</sup> Iowa Telecom May 19 Letter at 4-5.

AT&T's principal response is that Iowa Telecom is required to utilize Qwest's network because "FLEC principles require prices be based on the most efficient technology currently available" and Qwest's network is "a currently available technology" that must be deployed under the Commission's TELRIC rules.<sup>62</sup> AT&T offers no precedent for requiring consideration of another carrier's lease capacity rates, and none exists. Instead, the Commission's precedent refers to the "most efficient technology deployed in the incumbent LECs current wire center locations,"<sup>63</sup> which precludes AT&T's argument that "Qwest's network can be considered an available technology."<sup>64</sup> Moreover, as noted above, and explained in more detail in section IV.C.3 below, AT&T's arguments that use of Qwest's network is more efficient than the design chosen by Iowa Telecom are flawed and inconsistent with economic principles.

Iowa Telecom considered other factors before reaching its decision to utilize its own tandem switches rather than Qwest's tandems. These included: network control and service quality; the potential impact of any future network reconfiguration by Qwest, and the generation of revenues for network reinvestment.<sup>65</sup> Moreover, there is no evidence that Qwest would be willing to make the infrastructure investment that may be necessary to provide efficient tandem switching for all of Iowa Telecom's traffic.<sup>66</sup> Indeed, there is evidence to the contrary. When other independent telephone companies in the state asked Qwest to connect with modern

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<sup>62</sup> AT&T Opposition at 29-30.

<sup>63</sup> *Local Competition Order* at ¶ 685.

<sup>64</sup> Furthermore, the Commission should not make any fundamental change in TELRIC policy in the course of this tariff proceeding. If the Commission wants to expand its definition of "technology currently available," it should do so through the rulemaking process and apply any new rules prospectively only.

<sup>65</sup> See Iowa Telecom May 19 Letter at 6-7; Direct Case at 31.

<sup>66</sup> See Iowa Telecom May 19 Letter at 6; Direct Case at 28.

facilities, Qwest refused. Many of the independents banded together and built their own fiber facilities. Furthermore, Qwest has sold dozens of its rural exchanges to other carriers in recent years, indicating a desire to exit rural markets. The idea that Qwest has any interest in providing new facilities to serve most of rural Iowa is without foundation, and it is far from clear that Qwest wishes to continue serving its existing facilities.

Even in those few locations where Iowa Telecom could procure some capacity from Qwest, Iowa Telecom believes that would be an unsound decision for several reasons. First, the cost of leasing facilities from Qwest would be higher than the incremental cost of adding capacity to Iowa Telecom's own host switches and transport facilities. Second, Iowa Telecom has no assurance that Qwest will retain the rural facilities it now has. Third, Iowa Telecom's average costs would be even higher if it took some traffic volume off its own network. Finally, there are numerous benefits of retaining management and operational control over its own network. These benefits are difficult to quantify precisely, but they are real and significant. For example, Iowa Telecom is clearly more interested in maintaining and restoring the facilities it uses than would be Qwest; and the costs of coordination are much lower if a single organization is responsible for network maintenance and restoration.<sup>67</sup> Therefore, AT&T's assertions that it would be appropriate for Iowa Telecom to rely on the use of Qwest's facilities is without merit and inconsistent with current TELRIC principles.

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<sup>67</sup> Nevertheless, when alternative fiber facilities are available, Iowa Telecom does consider their use and uses them when appropriate. Three of the OC-48 rings in Iowa Telecom's proposed facility network will be provided jointly with other independent LECs in northeast and southwest Iowa. Also, Iowa Telecom's network will incorporate fiber [REDACTED].

## **B. Switching**

### **1. The Cost Study Appropriately Sizes Switching Capacity**

AT&T asserts that “Iowa Telecom’s network deploys so much capacity that the average monthly usage per trunk would be only [REDACTED] minutes,” below the 8,000 to 11,000 minutes range AT&T claims is contained in two GTE tariffs filed in 1997.<sup>68</sup> AT&T does not offer any explanation of how it came up with the [REDACTED] minutes number so it is impossible to determine whether the number is calculated correctly. Further, AT&T does not specify whether the GTE data reflected only toll trunk groups. Iowa Telecom does not have, and thus cannot either explain or defend, this purported GTE data. Moreover, Iowa Telecom’s own calculations produce an average monthly usage per trunk number of [REDACTED], based upon a comparison of Iowa Telecom’s interoffice minutes of use (“MOU”) and the number of its interoffice DS-0 trunks.<sup>69</sup> Therefore, AT&T’s argument regarding switching overcapacity is incorrect.

AT&T also complains that Iowa Telecom’s assumption of [REDACTED] spare switching capacity is excessive and should be capped at the 6% level used as a default in the Synthesis Model.<sup>70</sup> Iowa Telecom agrees that 6% is a reasonable amount of spare in the large central offices typically included in an RBOC TELRIC study. However, it is not representative of what Iowa Telecom, acting efficiently, can achieve in its own service area. Thus, Iowa Telecom calculated

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<sup>68</sup> See AT&T Opposition at 10. Iowa Telecom has already addressed AT&T’s comparison of the Iowa Telecom’s purported average monthly usage with the 10,044 minutes default value in the Synthesis Model. See *supra* pp. 10-11.

<sup>69</sup> This number is obtained by dividing the common transport MOU (Confidential Exhibit 2a, “other inputs” tab, cell D92) by the number of common DS-1 circuits (Confidential Exhibit 2a, “Circuits” tab, cell W6), with adjustments to convert the result to a monthly number for DS-0 trunks ( $[REDACTED] \div ([REDACTED] \times 12 \times 24) = [REDACTED]$ ).

<sup>70</sup> See AT&T Opposition at 14.

and applied a weighted average of spare capacity in all offices of approximately [REDACTED].<sup>71</sup> Indeed, this level of spare capacity is far less than the approximately [REDACTED] spare capacity that Iowa Telecom actually has in place today.<sup>72</sup>

## **2. Iowa Telecom Does Not Over Allocate Switching Costs to the Traffic-Sensitive Rate Or Recover More than 100% of its Switching Costs**

AT&T argues that a valid forward-looking economic cost study should “allocate all (or virtually all) of the cost of a switch to the non-traffic-sensitive (“NTS”) rate elements.”<sup>73</sup> This argument is based on the claim that “carriers pay an up-front cost that includes the cost of installation of the switch, and do not incur any additional costs associated with usage.”<sup>74</sup>

AT&T’s argument is contrary to the Commission’s precedent. The only switch costs that the Commission has held to be recoverable on an NTS basis are the costs of line side ports and dedicated trunk ports; all other switch costs are to be recovered through traffic-sensitive rate elements.<sup>75</sup> Furthermore, the Commission should not make any fundamental change in TELRIC policy during the course of this tariff proceeding. Instead, if the Commission wants to adopt

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<sup>71</sup> Iowa Telecom calculates a [REDACTED] spare capacity factor in its 14 largest central offices, each of which has 4,000 or more working lines. In its smaller offices, however, Iowa Telecom needs to utilize a spare capacity factor ranging from [REDACTED] to [REDACTED]. Iowa Telecom needs more spare facilities in its smallest remote locations for efficiency purposes, *e.g.*, to avoid trips across the state to pick up parts when a card fails. To put this in some perspective, Iowa Telecom plans to have just [REDACTED] spare line cards in its smallest locations. This amount is hardly excessive (each line card serves four lines), but it can represent [REDACTED] of office capacity in a small office.

<sup>72</sup> See Direct Case at 59 n.96.

<sup>73</sup> AT&T Opposition at 20.

<sup>74</sup> *Id.*

<sup>75</sup> See Access Charge Reform, CC Docket No. 96-262, First Report and Order, 12 FCC Rcd 15982, ¶¶ 125-127 (1997), *aff’d sub nom. Southwestern Bell v. FCC*, 153 F.3d 523 (8th Cir. 1998).



such a policy, it should do so through the rulemaking process and apply the new rules prospectively.

Assuming for the sake of argument that the upfront costs of a switch are virtually all fixed costs, this does not mean that fixed costs should be allocated only to NTS rate elements as a matter of economic principle. If in fact switches rarely reach peak capacity based on usage, then the economic implication is that the costs of the switch processor and common equipment should be considered equivalent to upfront fixed or startup costs that must still be recovered in the aggregate from Iowa Telecom's switched services. It would be economically incorrect to recover all of these costs through NTS rate elements. These costs are effectively shared costs. In competitive markets, the firm would recover these costs from its different services based on the conditions and characteristics in the market—and there is no reason to believe that these (alleged) startup costs would be recovered through NTS charges. The Commission has found that shared and common costs should be recovered based on the relative use of the network element in question.<sup>76</sup> This is exactly what Iowa Telecom's cost study does.

As an alternative argument, AT&T raises once again its argument that is inappropriate to allocate 15% of Iowa Telecom's switching costs as NTS costs.<sup>77</sup> As explained in Iowa Telecom's May 19, 2003 ex parte and its April 7, 2003 Reply, the 15% allocation is appropriate for Iowa Telecom and is supported by estimates obtained from two switch vendors.<sup>78</sup> AT&T's arguments based on the embedded costs of other carriers are simply not relevant to Iowa

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<sup>76</sup> See Shelanski's Affidavit at 11 (citing *Local Competition Order* at ¶ 682).

<sup>77</sup> See Iowa Telecom May 19 Letter at 7-11; Reply of Iowa Telecom, Transmittal No. 31, Apr. 7, 2003, at 16-20 ("Iowa Telecom Reply").

<sup>78</sup> See Iowa Telecom May 19 Letter at 8; Iowa Telecom Reply at 16-17.

Telecom.<sup>79</sup> Certainly, AT&T's reliance upon an unverifiable "workpaper" from Aliant, dated November 1997, to justify an adjustment reducing Iowa Telecom's traffic-sensitive allocation of switching costs from 85% to 58.12% is completely without basis.<sup>80</sup>

AT&T continues to claim that Iowa Telecom would over-recover its costs if it is permitted to recover 85% of its FLEC switch costs through traffic-sensitive rates, based on a hodgepodge argument that mixes GTE's embedded 1997 tariff rates combined with a forward-looking analysis.<sup>81</sup> Yet, AT&T makes no effort to refute any of Iowa Telecom's arguments – presented on two previous occasions– that it would not over-recover switching costs because its common line rates are presently set below FLEC.<sup>82</sup> Instead, AT&T asserts that Iowa Telecom's position is merely a "legal argument," unsupported by factual data.<sup>83</sup> It is a matter of established fact, however, that Iowa Telecom's common line rates are presently set well below FLEC.<sup>84</sup> It is also a matter of fact that two switch vendors estimate that a 15% allocation to NTS costs is appropriate for the switches deployed in Iowa Telecom's network.<sup>85</sup> As it cannot rebut these facts with any relevant facts of its own, AT&T's argument must fail.

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<sup>79</sup> See AT&T Opposition at 21 & n.24 (citing a 1997 "workpaper" of Aliant).

<sup>80</sup> See *id.* at 22-23, 37.

<sup>81</sup> See *id.* at 21-22.

<sup>82</sup> See Iowa Telecom May 19 Letter at 9; Iowa Telecom Reply at 19.

<sup>83</sup> AT&T Opposition at 22.

<sup>84</sup> See Letter from James U. Troup to Magalie Salas, CC Docket Nos. 96-262 and 94-1, Nov. 16, 2001, Exhibits A and B (submitting data showing that Iowa Telecom's forward-looking loop costs are significantly higher than the subscriber line charge cap).

<sup>85</sup> See Iowa Telecom May 19 Letter at 8; Iowa Telecom Reply at 16-17.

### 3. The Cost Study Appropriately Estimates Switching Investment

AT&T disputes Iowa Telecom's use of vendor quotes, claiming that only switch contracts are sufficient in order to prevent fraud.<sup>86</sup> AT&T speculates that Nortel has an incentive to inflate quotes to help out Iowa Telecom in this cost study.<sup>87</sup> These assertions are completely baseless. There are a number of factors present in the current case that provide the Commission with assurance that the quotes are reliable indications of Iowa Telecom's forward-looking costs for switches. First, the 39 quotes for which Iowa Telecom submitted data were obtained in the ordinary course of business, not for purposes of the cost study. Nortel has every incentive to provide a realistic estimate of the prices it will charge because the market for switching equipment is extremely competitive. Second, in the six instances in which Iowa Telecom purchased switches from Nortel, the actual installed price paid by the company exactly matched Nortel's price quote, and Iowa Telecom's Vice President of Engineering attested to all of the factual statements in the Direct Case.<sup>88</sup> Finally, AT&T has offered no factual evidence to contradict any of Iowa Telecom's representations regarding switch (or transport) prices. Given all of these factors, the Commission should accept the vendor quote data as reliable evidence of Iowa Telecom's forward-looking switch costs.

AT&T also challenges several aspects of the switch cost regression analysis. It claims that "because the regression analysis uses only a single host/tandem switch it cannot possibly produce a statistically valid relationship between the price for host/tandem switches and the

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<sup>86</sup> See AT&T Opposition at 14-15.

<sup>87</sup> See *id.* at 16.

<sup>88</sup> See Direct Case at 53.

number of lines and trunks.”<sup>89</sup> Contrary to AT&T’s claim, the estimated relationship between the number of lines and trunks and costs for host switches is not based on a single host switch. Rather, it is based on a sample of 39 host and remote switches for which Iowa Telecom obtained price quotes from Nortel. Furthermore, with regard to DMS-10 switches, the sample is supplemented by extensive data from the same source of switch data as the Synthesis Model.<sup>90</sup> That is, the regression analysis estimates the relationship between switch costs and demand characteristics by using the remote and host/tandem price quote observations collectively to estimate switch costs.<sup>91</sup>

As a second issue, AT&T asserts the regression analysis produced erroneous results, citing the fact that a constrained regression was performed in which DS-1 trunk costs were constrained based on vendor pricing for that switch component.<sup>92</sup> The use of this method, however, does not reflect problems with the sample data. Rather, it corrects for a well-known statistical problem – multi-collinearity – in this case, between the number of lines and the

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<sup>89</sup> AT&T Opposition at 17.

<sup>90</sup> See Direct Case at 51 n.71.

<sup>91</sup> Although AT&T criticizes the adequacy of Iowa Telecom’s sample of 39 price quotes, the data refute this claim. The vendor price quotes exhibit significant variation, from a minimum of [REDACTED] lines and [REDACTED] trunk ports to a maximum [REDACTED] lines and [REDACTED] trunk ports, with standard deviations of [REDACTED] and [REDACTED], respectively. The vast majority (92%) of the switches in the study are within the line size range of the regression sample. Moreover, only about 4% of the switches in the cost study have more trunks than those in the sample. The sample is thus representative of the range of switches to which the resulting regression equation is applied. AT&T’s allegation regarding the Rockwell City switch is also off the mark. See AT&T Opposition at 17. The switch configuration used in the regression analysis is the one for which Nortel provided a price quote. The regression coefficients were then used to develop a cost estimate for the switch configuration used in the cost calculator. This is a standard and appropriate use of regression data. Moreover, although the number of trunk ports use for the quote is lower than the number used in the calculator, this does not undermine the accuracy of the cost estimate, because the trunk port costs are estimated based on separate cost information to avoid the multi-collinearity problems discussed in the text. Finally, note that the Rockwell City price quote has fewer trunk ports than the configuration used in the cost model because the vendor quote for Rockwell City did not include trunk ports for host/remote links.

<sup>92</sup> See AT&T Opposition at 18.

number of trunks in a switch.<sup>93</sup> When two variables (such as lines and trunks) are closely related in size, it is simply not possible to obtain accurate coefficient estimates for each of them. Specifically, the variance inflation factor tolerance level (“VIF tolerance”) of the trunk ports variable is ■■■■, which indicates that less than ■■■■% of the variance in the trunk ports variable is not explained by the other explanatory variables in the regression – access lines and the host/tandem dummy variable.<sup>94</sup> As a result, Iowa Telecom enhanced the accuracy of its switch investment forecast by augmenting the regression with additional trunk port pricing information.<sup>95</sup>

With regard to volume discounts for switches, AT&T objects to the 10% adjustment in the cost study to account for the volume discount reflected in the sample data and, in addition, suggests that Iowa Telecom would be able to obtain discounts greater than 10% in the future. These arguments must fail, however, because AT&T provides only speculation and no factual basis to support either assertion. Although Iowa Telecom’s cost study determines that all switches will be revalued at current purchase prices, consistent with the Commission’s TELRIC rules, the company will not actually be replacing all of its switches in the next two years.<sup>96</sup> In fact, Iowa Telecom stated in its Direct Case that it will not be purchasing sufficient numbers of

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<sup>93</sup> The Commission has acknowledged that collinearity is typically present in multiple regression models. *See, e.g.*, Federal-State Joint Board on Universal Service, CC Docket No 96-45, Tenth Report and Order, 14 FCC Rcd 20156 at C-3, ¶ 7 (1999), *aff’d*, *Qwest Corp. v. FCC*, 258 F.3d 1191 (10th Cir. 2001).

<sup>94</sup> *See* Damodar Gujarati, *Basic Econometrics* at 328 (3d ed. 1995).

<sup>95</sup> *See* Direct Case at 54.

<sup>96</sup> Literally replacing all switches at one time actually would generate substantial costs from network disruptions, the need to hire extra personnel to accomplish such a rapid transition, borrowing costs, and many other factors. Thus, even if greater discounts could be obtained for volume purchases of equipment, the installed costs would also reflect cost increases that may offset the volume discounts.

switches over the next three years to obtain any vendor discount, and AT&T has failed to offer anything to rebut this evidence.<sup>97</sup> During this period, Iowa Telecom anticipates that it will purchase [REDACTED] hosts switches and [REDACTED] remotes. Thus, Iowa Telecom's judgment, it will not be purchasing sufficient numbers of switches during this period to achieve volume discounts from switch vendors.<sup>98</sup>

AT&T's argument with respect to operation and maintenance ("O&M") is similarly flawed. AT&T asserts that Iowa Telecom's 2002 maintenance costs cannot be used in a FLEC study because its planned 2010 network would have only 10 host switches and thus Iowa Telecom should then be able to realize O&M savings. Although reducing the number of hosts should eventually lead to lower O&M costs, no savings will be realized during the period that Iowa Telecom's FLEC ATS rates will be in effect because the host-remote switch configuration is not expected to change during that period.<sup>99</sup> Iowa Telecom's assumption of 2002 O&M cost is therefore appropriate in these particular circumstances.

#### **4. The Cost Study Properly Calculates Demand for Switching**

AT&T argues that Iowa Telecom appears to improperly convert Dial Equipment Minutes ("DEMs") to Switched Minutes of Use ("SMOUs"), because Iowa Telecom's cost study "divides

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<sup>97</sup> See Direct Case at 55.

<sup>98</sup> See Direct Case at 55. These are Iowa Telecom's best estimates at this time; actual purchases will depend on a number of factors, including available net income. See *id.* at 4 n.7.

<sup>99</sup> In any event, even if the cost study were to be based upon the 2010 network and included O&M costs savings, Iowa Telecom's recalculation in the Direct Case has shown that the net impact of using a 2010 network would be to raise the ATS target rate, not lower it. See Direct Case at 13-14; Confidential Exhibit 3a. It is inappropriate, therefore, for AT&T to selectively claim a reduction based on lower O&M expenses without recognizing other impacts of assuming a 2010 network that would increase the ATS target rate.

all residual local DEMS by two, regardless of whether they are interoffice or intraoffice calls.”<sup>100</sup> AT&T is simply wrong on this point. The calculator divides only intraoffice minutes by two.<sup>101</sup> Moreover, Iowa Telecom does apply the rates consistent with the way in which unit costs were developed. Thus, there is no overstatement of switching costs due to “failing to properly calculate total demand for switching.”

### **C. Transport**

#### **1. The Cost Study Appropriately Sizes Transport Capacity**

AT&T asserts Iowa Telecom has overstated the cost of interoffice facilities by using OC-48 rather than OC-12 capacity fiber in many of its backbone rings.<sup>102</sup> AT&T argues: “Iowa Telecom is able to point to only one route where OC-12 capacity is inadequate. Direct Case at 33. By implication, the Commission must assume that OC-12 capacity is fully sufficient for all other transport routes.”<sup>103</sup>

AT&T’s argument by “implication” is baseless. The portion of the Direct Case cited by AT&T described (and cited) a response that Iowa Telecom provided to the Bureau staff on May 19, 2003.<sup>104</sup> As explained in the May 19, 2003 Letter, which AT&T has received, Iowa Telecom was responding to the Bureau staff’s specific question regarding the company’s most heavily

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<sup>100</sup> AT&T Opposition at 24.

<sup>101</sup> See Confidential Exhibit 2b, “Usage Summary” tab, cell B88 (dividing the “EO Local Minutes” number from cell B87 by 2, but making no adjustment to other end office MOU).

<sup>102</sup> See AT&T Opposition at 25.

<sup>103</sup> *Id.*

<sup>104</sup> See Direct Case at 33 (citing Iowa Telecom’s May 19 Letter at 2).

trafficked ring segment.<sup>105</sup> Iowa Telecom's response was therefore directed to one particular segment of one of its OC-48 rings. It is a leap of logic for AT&T to assume that Iowa Telecom's direct response to a limited question shows that OC-48 capacity is not required for Iowa Telecom's other fiber rings.

Contrary to AT&T's assumption, OC-48 capacity is appropriate for each of Iowa Telecom's nineteen principal fiber rings. An OC-12 ring will carry 10 DS-3 signals (83% fill). If more than 10 DS-3s are needed, there are two choices: equip two OC-12 rings or one OC-48 ring. As Iowa Telecom noted in its Direct Case, the material cost difference between an OC-48 and an OC-12 terminal is \$[REDACTED].<sup>106</sup> Assuming that a ring must carry more than 10 DS-3s, and considering only material costs, a transport network with one OC-48 ring represents a lower cost solution than two OC-12 rings because of the lower terminal costs – two OC-12 terminals cost [REDACTED]% more than one OC-48 terminal.<sup>107</sup> Other factors (*e.g.*, central office space, fiber utilization) would also weigh in favor of deploying one OC-48 ring instead of two OC-12 rings.

Although Iowa Telecom has not fully engineered every one of its nineteen planned OC-48 rings, an abbreviated analysis based on a count of the number of remotes on, or subtending, each of these rings demonstrates that [REDACTED] of the planned OC-48 rings will carry considerably more than 10 DS-3s. With regard to the [REDACTED] rings, [REDACTED] and it is therefore reasonable to deploy OC-48 capacity facilities at a modest additional cost for equipment, rather than deploy OC-12 facilities that may well need to be replaced with

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<sup>105</sup> See Iowa Telecom May 19 Letter at 2.

<sup>106</sup> Direct Case at 33.

<sup>107</sup> The OC-12 and OC-3 terminals use the same plug-ins and subtending multiplexers.



OC-48 facilities in a few years – at significant cost – when more transport capacity is needed.

The remaining ring is designed as a backup for [REDACTED] and it is thus necessary and appropriate to design this ring with OC-48 facilities to provide sufficient capacity to handle backup traffic. Accordingly, OC-48 facilities are reasonable and appropriate for all nineteen of Iowa Telecom’s backbone fiber rings.

Furthermore, it is important to note that AT&T has not challenged any other aspect of Iowa Telecom’s transport network design. AT&T does not object to Iowa Telecom’s proposed use of OC-3 on subtending rings. In its forward-looking network plan, Iowa Telecom will drop one DS-3 off a collapsed OC-3 ring for most remote offices.<sup>108</sup> These DS-3s will home run to the host location.<sup>109</sup> There will be no intermediate locations where Iowa Telecom will “demux” the DS-3. As depicted on its network maps, Iowa Telecom will use Fujitsu’s FLM 150 Add/Drop Multiplexer (ADM) to cross-connect DS-3s between OC-3 and OC-48 rings. With this architecture, Iowa Telecom will avoid needing additional intermediate multiplexing (*e.g.*, M1/3 multiplexer) and will minimize operational and administrative expenses.

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<sup>108</sup> This is consistent with a least cost approach. Although dropping just one DS-3 at each remote creates a “single point of failure” both in the DS-3 and the OC-3 card, Iowa Telecom cannot justify the additional cost of providing a second DS-3 or OC-3 card in each remote. Similarly, it plans to use collapsed OC-3 rings instead of true OC-3 rings, which would require nearly double the fiber route miles. Iowa Telecom will protect itself as best it can in these very small offices by having redundant DS-1 terminations and collapsed fiber rings. Therefore, this network design minimizes costs, even though it does not provide full redundancy.

<sup>109</sup> At least four of the 28 DS-1s in each DS-3 will be used for host-remote trunks and will terminate on the host switch. This design leaves up to 24 unused DS-1s at each remote. In theory, a few of these DS-1s could be used to provide private line and data services. In reality, Iowa Telecom expects [REDACTED] demand in these remote locations. Nonetheless, it has allocated [REDACTED] each for private line and data services at each remote. This effectively allocates [REDACTED] of all OC-3 capacity to services with [REDACTED] demand.

AT&T argues that the cost study should include an offset based on “revenues it generates from leasing spare capacity to other carriers.”<sup>110</sup> As Iowa Telecom explained in its Direct Case, no such offset is appropriate because any such revenues are no different from revenues that the company generates from other wholesale services leased to other carriers.<sup>111</sup> Although it claims that this explanation “misapprehends basic FLEC principles,”<sup>112</sup> AT&T fails to identify any TELRIC principle that is violated by not providing an offset for revenues from wholesale services. Instead, AT&T states only that “it is a violation of FLEC principles to oversize the network.”<sup>113</sup> This is, of course, a truism, but it is irrelevant in this case. As explained above, Iowa Telecom has, if anything, erred by undersizing its network.<sup>114</sup>

## **2. The Cost Study Correctly Allocates an Appropriate Portion of Transport Costs to Interstate Switched Services**

AT&T claims that the proposed ATS transport rates would over-allocate transport costs to interstate switched services. This argument is based on several incorrect assumptions. First, AT&T asserts that Iowa Telecom’s cost study improperly “allocat[es] the entire cost of the proposed transport network to switched (and perhaps, some special access) services.”<sup>115</sup> Second, based on the mistaken premise that all transport costs are allocated to switched services, AT&T argues that the cost study produces a rate that would allow Iowa Telecom to “unlawfully recover

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<sup>110</sup> AT&T Opposition at 26.

<sup>111</sup> See Direct Case at 32.

<sup>112</sup> AT&T Opposition at 26.

<sup>113</sup> *Id.*

<sup>114</sup> See *supra* note 108.

<sup>115</sup> AT&T Opposition at 33.

a disproportionate share” of its total transport costs through its ATS rate.<sup>116</sup> Based on a review of circuit data, AT&T claims that “Iowa Telecom appears to be allocating at least █% of transport costs to interstate traffic.” AT&T then concludes, without explaining how, that Iowa Telecom’s transport costs should be discounted by 55% so that the company recovers only 45% of its total transport costs through its ATS charges.<sup>117</sup>

This argument makes no sense and is clearly refuted for four reasons. First, AT&T’s initial premise is incorrect – the cost study does not allocate all of Iowa Telecom’s transport costs to switched services. As even AT&T recognizes, █ of the total circuits in the cost study (*i.e.*, █% of the total of █ circuits) are non-switched circuits.<sup>118</sup> As the cost study allocates transport costs between common and dedicated (which includes non-switched) services on the basis of circuit counts, the cost study allocates █% of transport costs to non-switched services. AT&T’s assertion that the cost study allocates no transport costs to non-switched services is thus flat wrong.

Second, the FLEC rates developed by the cost study do not recover a disproportionate share of Iowa Telecom’s total transport costs from interstate switched services. Iowa Telecom’s total transport FLEC is approximately \$█ million.<sup>119</sup> Of this amount, only approximately

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<sup>116</sup> *Id.*

<sup>117</sup> See AT&T Opposition at 35, 37. AT&T’s claim that this adjustment “would result in an ATS rate that is reduced by 45% to 65% from the level proposed by Iowa Telecom” is also clearly incorrect. *Id.* at 35. AT&T’s assertion is refuted by its own calculation, which shows that the adjustment would reduce the ATS rate from \$1.4060 to \$1.0553 cents per minute, a change of 25%.

<sup>118</sup> See AT&T Opposition at 34.

<sup>119</sup> It is the sum of cells G65, G68, G72 and G75 of the “Unit Calcs” tab of the cost calculator (\$█). See Confidential Exhibit 2a.

\$[REDACTED] million is attributed to interstate switched services and recovered through the ATS rate.<sup>120</sup>

The portion of Iowa Telecom's total transport costs that is recovered through interstate switched services is thus only [REDACTED]% (\$[REDACTED]/\$[REDACTED]). This is considerably less than the [REDACTED]% figure that AT&T calculates, [REDACTED] the unsubstantiated 55% figure that AT&T touts as an appropriate adjustment. Therefore, there is no basis for any downward adjustment to exclude the recovery of a portion of Iowa Telecom's transport costs for ATS services.

Third, AT&T offers no basis for this 55% adjustment other than it is derived from the average of two discounts that AT&T believes should be applied to total transport costs: a 65% traffic percentage that is apparently reported by three RBOCs for "other local exchange carriers," and a 45% figure for "data traffic," apparently also reported by the same three RBOCs. The implications of this are unclear. Who are the "other local exchange carriers"? Why are the traffic patterns of these "other local exchange carriers" relevant to Iowa Telecom's FLEC ATS target rate? AT&T provides no indication. In its July 18 Errata, AT&T replaced its original citation with a citation to three "Quarterly Earnings Reports of BellSouth, Qwest and Verizon for 4Q2002,"<sup>121</sup> but this new citation is too vague to permit verification. AT&T's attempt to propose a significant downward adjustment to Iowa Telecom's ATS target rate based on such weak argumentation with no evidence should not be given any credence. This proposed adjustment is particularly egregious because it represents AT&T's single largest proposed adjustment by far.<sup>122</sup>

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<sup>120</sup> See Confidential Exhibit 2a, "ATS Calc" tab, cell N43 (\$[REDACTED])

<sup>121</sup> AT&T Opposition at 35 n.32.

<sup>122</sup> See AT&T Opposition at 37 (proposing a reduction in the ATS target rate to 1.0553 cents per minute based on this adjustment).

Fourth, any downward adjustment would preclude Iowa Telecom from recovering the full measure of its transport costs that are attributable to ATS services. The cost study ATS rate calculation excludes transport costs that are attributable to intrastate and non-switched services.<sup>123</sup> Any adjustment to the ATS target rate proposed by Iowa Telecom would thus prevent recovery of a portion of the transport costs that are properly allocated to ATS services. There is no basis for any such downward adjustment.

### **3. There Is No Precedent to Support a Cap on Iowa Telecom's FLEC Transport Rates Based on Qwest's FLEC Rates**

AT&T raises a novel argument that Iowa Telecom's transport rates should be capped at the level of Qwest's transport rates, based on the theory that Qwest is a competitor with Iowa Telecom for the provision of access services.<sup>124</sup> AT&T cites no precedent for such an interpretation of the Commission's TELRIC rules and indeed none exists.

Iowa Telecom has provided numerous arguments against such a cap in its Direct Case.<sup>125</sup> First, there is no precedent for the imposition of such a cap, and a cap would be inconsistent with the fundamental purpose of TELRIC, which is to establish a carrier's own forward-looking costs of providing a service.<sup>126</sup> This is particularly important in this case, because the two companies have very different cost characteristics – Qwest is an RBOC and Iowa Telecom is rural carrier operating in more rural areas. Moreover, because all of Iowa Telecom's exchanges are in rural areas, it does not have the ability to spread costs between rural and non-rural exchanges.

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<sup>123</sup> See Iowa Telecom ATS Cost Study, Mar. 25, 2003, at 21 ("Cost Study").

<sup>124</sup> See AT&T Opposition at 28-29.

<sup>125</sup> See Direct Case at 26-28.

<sup>126</sup> See *id.* at 27.

The imposition of a cap would also be at odds with the Commission’s *Forbearance Order*, which directed Iowa Telecom to reset its rates based on a FLEC study of its own network, not the network of Qwest.<sup>127</sup> A cap based on Qwest’s rates would also be inappropriate given the fact that Iowa Telecom is in the process of transitioning all of its tandem traffic away from Qwest’s network,<sup>128</sup> and there is no evidence – and certainly no guarantee – that Qwest wants to continue providing tandem services to Iowa Telecom or will continue providing services in the future.<sup>129</sup> Notably, AT&T has not attempted to rebut any of these arguments. Furthermore, as Iowa Telecom has previously noted, the implementation of a TELRIC “cap” would represent a significant change in policy, which should not be implemented in the course of a tariff proceeding. If the Commission wants to adopt such a change in policy, it should do so through the notice and comment rulemaking process and apply any new rules prospectively.

Moreover, despite AT&T’s claims, its argument for capping Iowa Telecom’s tandem rates based on Qwest’s rates is not consistent with sound economic principles. AT&T argues that “to the extent that Iowa Telecom’s rates exceed those of Qwest over particular routes, Iowa Telecom could provide a lower-cost service by leasing Qwest’s facilities.”<sup>130</sup> Based on this incorrect statement, AT&T concludes that “Iowa Telecom’s transport rates should therefore be no higher than Qwest’s transport facilities.”<sup>131</sup> AT&T’s argument confuses costs with rates and ignores the basic economic principle that the relevant costs to consider in making network design

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<sup>127</sup> See *Forbearance Order* at ¶ 23.

<sup>128</sup> See Direct Case at 26.

<sup>129</sup> See *id.* at 28.

<sup>130</sup> AT&T Opposition at 28.

<sup>131</sup> *Id.*

and expansion decisions in competitive markets (or in any unregulated market) are incremental costs, not TELRIC or FLEC. First, contrary to AT&T's allegations, using Qwest's tandem services will not allow Iowa Telecom to provide "lower-cost" carrier access services; nor will re-homing switches from Qwest's tandems to its own tandems increase Iowa Telecom's costs. As explained above, Iowa Telecom cannot provide lower cost services by leasing from Qwest because Iowa Telecom's incremental cost for adding tandem service to its host switches is lower than the lease rates charged by Qwest. AT&T may benefit from lower rates if Iowa Telecom leases more tandem services from Qwest; however, Iowa Telecom's forward-looking incremental costs will not be reduced. As economists have long recognized, "[o]ptimal decisions must be made on the basis of marginal cost and marginal revenues, not average cost and average revenue figures."<sup>132</sup> Thus, by using its own switches to provide tandem service, Iowa Telecom would be acting efficiently.

AT&T also argues that one of the goals of a forward-looking pricing methodology is to establish prices that approximate what a firm would charge in a competitive market and that in such a market Iowa Telecom would not be able to charge access rates that exceed Qwest's interstate access rates.<sup>133</sup> In a competitive market multi-product firms would not set rates based on FLEC, which recovers incremental costs plus an allocation of shared and common costs based on relative usage of the network elements. Rather, unregulated competitive firms would set rates based on incremental cost plus a margin to recover shared and common costs determined by demand conditions for each of the services that use the network elements. Moreover, in

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<sup>132</sup> William J. Baumol & Alan S. Blinder, *Economics Principles and Policy*, at 549 (4th ed. 1988).

<sup>133</sup> See AT&T Opposition at 28.

considering the true cost of leasing Qwest's network rather than re-homing Iowa Telecom needs to consider the various indirect costs discussed above, *e.g.*, network control and service quality.<sup>134</sup> Finally, Qwest's rates are set based on its average FLEC across markets, including considerably higher density areas than those served by Iowa Telecom. Thus, the cost of using Qwest's network access in more rural areas would likely not be reflected in its averaged rates, and such averaged rates would likely not prevail in competitive markets. Again the fallacy is between average costs—here over different geographic areas—and incremental costs of a network option. Therefore, Qwest's rates are not the appropriate guide for setting Iowa Telecom's tandem access charges.

Finally, AT&T also incorrectly claims that Iowa Telecom is now “using demand patterns for a different year and . . . assuming away efficiencies associated with Iowa Telecom's recent re-homing . . . . A proper correction would have assumed: (1) the same underlying demand data set (*i.e.*, 2002 data) and (2) use of the re-homed switches when that produces a lower cost, and the use of Qwest's switches when that produces a lower cost [sic] (*i.e.*, it should assume the least-cost most efficient technology is deployed).”<sup>135</sup> AT&T appears to have misunderstood Iowa Telecom's recalculation based on the traffic that Iowa Telecom currently routes to Qwest tandems. Iowa Telecom's recalculation uses exactly the same end-of-year 2002 traffic data as before. The only difference is that the recalculation reflects recently completed re-homing of Iowa Telecom tandems so that it accurately reflects the homing of Iowa Telecom's tandem traffic as of July 2, 2003. Moreover, Iowa Telecom has performed this re-homing precisely

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<sup>134</sup> See *supra* pp. 18-19; see also Iowa Telecom May 19 Letter at 6-7; Direct Case at 28, 31.

<sup>135</sup> AT&T Opposition at 30-31.



because it produces a lower incremental cost than would be incurred from the use of Qwest's switches. AT&T's argument is thus fundamentally flawed.

#### **4. The Cost Study Appropriately Reflects The Forward-Looking Outside Plant Costs That Iowa Telecom Will Incur Using Efficient Engineering Practices**

AT&T asserts that Iowa Telecom has employed a "bizarre" assumption ■■■ feet per mile in the cost study's calculation of transport cable and structure investment.<sup>136</sup> AT&T itself contradicts this argument, however, when it concedes that "[t]here may be some justification in assuming somewhat more than 5,280 feet per mile for cable to allow sufficient slack for splicing."<sup>137</sup> The simple answer is that the cost study's calculation is entirely within the realm of efficient engineering practice. Iowa Telecom has assumed "spare" cable of just ■■■ feet per mile, or ■■■% – equivalent to ■■■ per foot – for splices, going around corners, avoiding obstacles and variations in achieved plow depth. This is a very minimal allowance, and AT&T does not suggest or support any lower figure.

With regard to structure costs, the impact of using ■■■ feet per mile is *de minimis*. Only ■■■ feet out of ■■■ (■■■%) is in conduit; ■■■ aerial.<sup>138</sup> At most, this would theoretically reduce the amount of conduit by ■■■ per mile. But in reality, virtually all of the ■■■ feet of "excess" cable per mile will be attributable to buried cable and very little, if any,

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<sup>136</sup> AT&T Opposition at 28.

<sup>137</sup> *Id.* at 28 n.30.

<sup>138</sup> Direct Case at 46.

will be attributable to conduit.<sup>139</sup> Therefore, any impact on structure costs would be *de minimis* and accordingly no adjustment to the ATS target rate is appropriate.

AT&T also challenges Iowa Telecom's assumptions regarding sharing of outside plant costs. It asserts that the cost study should assume that 75% of all conduit and trenched cable is shared with feeder structures, applying the Synthesis Model default value.<sup>140</sup> The cost study inputs reflect that [REDACTED] conduit is shared, [REDACTED] trenched cable is shared.

AT&T has provided no justification as to why the 75% sharing ratio for conduit and trenched cable is more appropriate than the calculations used in the cost study. The Synthesis Model default value was developed for application to non-rural LECs, not rural carriers, and it is derived from non-rural carrier data. In contrast, the sharing ratios calculated in the cost study are based upon Iowa Telecom's current engineering practices and certainly are more appropriate for application to Iowa Telecom's particular circumstances than the Synthesis Model default value.<sup>141</sup>

Furthermore, the TELRIC framework applied in the cost study replaces the network completely with new equipment, but reflects the fact that replacement will occur over time, not instantaneously. As a result it is not appropriate to assume that copper feeder cable and fiber interoffice plant can be or would be installed at the same time and thus would share the cost of trenching. Such simultaneous replacement would only occur if both types of plant were to be

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<sup>139</sup> There will likely be no conduit splices and, because conduit is typically deployed along highways in or close to towns, there will likely be no obstacles and corners, if any, are likely to be square.

<sup>140</sup> See AT&T Opposition at 31.

<sup>141</sup> In any event, any adjustment would have two components – one for conduit and one for trenched cable – [REDACTED]. Furthermore, because the proportions of cable that are placed in conduit ([REDACTED]%) and by trenching ([REDACTED]%) are [REDACTED], and because the cost savings per mile are far from clear, any impact on the ATS target rate would likely be [REDACTED].

replaced at the same time or over many years on the same schedule. This has not, and will not, occur. It therefore would not be appropriate to assume that 75% of trenching costs would be shared during the period the FLEC ATS target rate would be in effect.

## **5. The Two Minor Mathematical Adjustments Suggested by AT&T Are Appropriate and Increase the ATS Target Rate**

AT&T proposes two minor mathematical adjustments to the cost calculator that Iowa Telecom acknowledges are appropriate. AT&T asserts that the cost calculator (1) incorporates an incorrect number for “average switched circuit miles” and (2) an incorrect distance unit in the V&H coordinate system.

Regarding the first issue, AT&T is correct that the average circuit distance for a dedicated circuit should be [REDACTED] miles, not [REDACTED] miles as stated in Iowa Telecom’s cost calculator. The number included in the cost calculator inadvertently was based upon data for only two of Iowa Telecom’s three study areas. Therefore, Iowa Telecom agrees that this correction should be made. The correction, however, increases the ATS target rate because it decreases the total number of minutes miles that traverse Iowa Telecom’s interoffice network but does not impact the calculation of interoffice investment, which is based on the specific distances for each interoffice segment (not the average distance). This correction would increase the ATS target rate from 1.4060 to 1.4267 cents per minute.<sup>142</sup> See Confidential Exhibit 13.

Regarding the V&H coordinate issue, AT&T is correct that the precise distance unit for the V&H coordinate system is the square root of 1/10<sup>th</sup> of a mile (0.3162), which is less than the one-third of a mile (0.3333) distance unit used in the cost calculator. Iowa Telecom used the

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<sup>142</sup> AT&T did not include this upward adjustment in its “Summary of Corrections.”

0.3333 value as a conservative approximation based on information obtained from Telcordia.<sup>143</sup>

Therefore, Iowa Telecom agrees that this correction also should be made. This correction increases the ATS target rate because the V&H coordinate system is used in the cost calculator to calculate minute miles over the interoffice network but does not impact the total interoffice investment. The 0.3333 distance unit results in a slight overestimate of transport minute miles, and thereby leads to a slightly understated ATS rate. The correction would increase the ATS target rate from 1.4060 to 1.4080 cents per minute. *See Confidential Exhibits 14a and 14b.*<sup>144</sup>

These two adjustments are not simply additive. Therefore, Iowa Telecom is submitting a revised cost calculator that incorporates both adjustments. The resulting ATS target rate is 1.4297 cents per minute. *See Confidential Exhibits 15a and 15b.*

**D. Iowa Telecom's Cost Study Does Not Inflate the ATS Rate to Reach a Pre-Determined Result**

AT&T questions the "Additional Switching Items to Reach Total," "Additional Transport Items to Reach Total" and six "hard-coded" items in the cost calculator, and claims that these items are "filler" values to reach a "pre-determined ATS rate."<sup>145</sup> In fact, these items represent interstate switched access products and services within the Traffic Sensitive and Trunking baskets that have very low or zero subscription levels. "Additional Switching Items to Reach Total," and "Additional Transport Items to Reach Total" include items such as entrance

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<sup>143</sup> See [http://www.trainfo.com/products\\_services/tra/vhpage.html](http://www.trainfo.com/products_services/tra/vhpage.html) (describing the V&H coordinate system and stating that the V&H distance unit is "approximately equal to one-third of a mile").

<sup>144</sup> Confidential Exhibit 14a is a modified "Cost Calculator.xls" file; Confidential Exhibit 14b is a modified "Cost Calculator – Usage.xls" file. These same designations are used for Confidential Exhibits 15a and 15b.

<sup>145</sup> See AT&T Opposition at 35.

facilities, multiplexing and nonrecurring ordering and installation charges. These items represent approximately \$60,000 in annual revenue. The six “hard coded” items mentioned by AT&T are for dedicated analog trunk ports, dedicated voice ports, voice grade direct trunks (fixed and per mile), DS-3 direct trunk transport and entrance facilities.<sup>146</sup> All of these products and services are therefore appropriately included in the ATS target rate calculation, and are not “filler” values used to reach a “pre-determined ATS rate” as AT&T alleges.

In total, these products and services account for less than \$200,000 (■%) of Iowa Telecom’s total ATS revenues. Because of the low demand for these services and the small amount of revenue that these items generate, Iowa Telecom did not derive FLEC rates for these items in its cost study. Instead, Iowa Telecom has used the tariff rate as a surrogate for the forward-looking cost.<sup>147</sup> Iowa Telecom is likely to be understating its investment because these services tend to be on obsolete and very lightly utilized equipment. Significantly, AT&T has not shown, or even alleged, that these rates are overstated. Moreover, given the small revenues generated from these services, these rates do not create a “serious deficiency” as AT&T claims. AT&T has not shown that any adjustment to the ATS target rate is appropriate for these items.

## **V. THE COMMISSION SHOULD REJECT AT&T’S BASELESS PROPOSED ADJUSTMENTS BECAUSE THEY LACK ANY SUPPORT**

In an effort to muddy the waters, AT&T has now presented wholly unsupported “corrections” that it offers in an attempt to counter the effect of the recalculations requested in the *Designation Order*. As explained in Iowa Telecom’s Direct Case, the net effect of the

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<sup>146</sup> See Confidential Exhibit 2a, “ATS Calc” tab (items shaded in yellow).

<sup>147</sup> The revenue from these switched access services is part of Iowa Telecom’s Tariff Review Plan (“TRP”) ATS calculation.

recalculations requested or suggested in the *Designation Order* is to raise the ATS target rate from 1.4060 to 1.6952 cents per minute.<sup>148</sup> AT&T provides no support for any of its “corrections” – despite the fact that it complains about the lack of documentation in Iowa Telecom’s numerous exhibits – and it is therefore impossible for Iowa Telecom or the Commission to verify how the adjustments have been made and whether they contain mathematical errors. Furthermore, as AT&T is the proponent of these proposed changes, it has the affirmative burden of establishing that the adjustments it proposes are justified. Given the complete lack of cost support offered by AT&T, the Commission should reject all of AT&T’s proposed “corrections.”

Despite the lack of detailed cost support for AT&T’s assertions, Iowa Telecom has responded in this Rebuttal to the various “corrections” proposed by AT&T and has shown that, with two exceptions, they lack merit. Significantly, AT&T has included only adjustments that would lower the ATS target rate, but excluded others that would increase the rates. For example, AT&T’s proposed correction to the “average switched circuit miles” value would increase the ATS target rate but is excluded from AT&T’s Summary of Corrections. Likewise, AT&T has proposed the use of Synthesis Model default inputs where they would lower the ATS target rate, but said nothing where the use of a default input would raise the rate. If the Commission were to consider adopting any of AT&T’s proposed “corrections,” it should take an even-handed

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<sup>148</sup> See Direct Case at 6-7. Adjusting for the two mathematical errors increases each of these rates by approximately 0.023 cents per minute. See *supra* Section IV.C.5.

approach and also include appropriate adjustments that raise the rate. Iowa Telecom has identified two such adjustments in this Rebuttal.<sup>149</sup>

## **VI. SPRINT’S ARGUMENT THAT ALL OF IOWA TELECOM’S ATS RATE ELEMENTS SHOULD BE SET AT FLEC IS CONTRARY TO THE EXPRESS LANGUAGE OF THE *FORBEARANCE ORDER***

Sprint argues that Iowa Telecom is required to set its individual rate elements that make up the composite ATS target rate to equal their individual FLECs.<sup>150</sup> Sprint attempts to reach this conclusion by claiming that the *Forbearance Order* adopted the FLEC option set forth in the *CALLS Order*.<sup>151</sup> Sprint’s conclusion is flat wrong. In the *Forbearance Order*, the Commission specifically rejected Iowa Telecom’s request that it be allowed to elect the FLEC option set forth in the *CALLS Order*.<sup>152</sup> Rather, it adopted the alternative relief sought by Iowa Telecom, *i.e.*, forbearance from the 0.95 cents per minute ATS target rate, thereby allowing Iowa Telecom “to reset Iowa Telecom’s ATS target rate at forward-looking cost levels.”<sup>153</sup> This alternative was never referred to in the *CALLS Order* and it is unreasonable to interpret it as bounded by the *CALLS Order* parameters. Indeed, the Commission explicitly recognized in the *Forbearance Order* that the relief granted differs from the *CALLS* FLEC option:

We conclude that this [alternative] relief is more appropriate than the relief sought in Iowa Telecom’s request that we forbear from the *CALLS* election rule. If we were to grant forbearance from the *CALLS* election rule, consistent with the *CALLS Order*, we would

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<sup>149</sup> See *supra* p. 8.

<sup>150</sup> See Sprint Opposition at 3.

<sup>151</sup> See *id.*

<sup>152</sup> *Forbearance Order* at ¶ 13.

<sup>153</sup> *Id.* at ¶ 23.

have to set all of Iowa Telecom’s rates at forward-looking cost and determine an appropriate X-factor for Iowa Telecom.<sup>154</sup>

The Commission reached this conclusion after noting that it “has the legal authority to make changes to the CALLS plan.”<sup>155</sup> As the relief granted in the *Forbearance Order* differs from the FLEC option stated in the *CALLS Order*, Sprint’s argument that “Iowa Telecom’s methodology is contrary to the structure the Commission established in the *CALLS Order*,” while true, is completely irrelevant.<sup>156</sup>

Iowa Telecom appropriately has followed the Commission’s directive in the *Forbearance Order* to reset its “ATS target rate” at FLEC.<sup>157</sup> Significantly, the *Forbearance Order* does not require Iowa Telecom to set its individual rate elements at FLEC, nor has Sprint identified any other Commission order or rule that requires each of the ATS rate elements to be set at FLEC. Furthermore, Sprint has not questioned the methodology used by Iowa Telecom to set the individual rate elements.

Sprint’s “financial impact” calculation<sup>158</sup> – which it offers to show that Iowa Telecom’s methodology recovers \$[REDACTED] million in revenue above the amount that would be recovered under Sprint’s interpretation of the *Forbearance Order* – thus falls by its own weight. This calculation is premised upon Sprint’s erroneous belief that the *Forbearance Order* requires Iowa

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<sup>154</sup> *Id.* at ¶ 22.

<sup>155</sup> *Id.* at ¶ 21.

<sup>156</sup> Sprint Opposition at 3.

<sup>157</sup> *Forbearance Order* at ¶ 23.

<sup>158</sup> See Sprint Opposition at 4.



Telecom to comply with the parameters of the CALLS FLEC option and reset individual rate elements at FLEC. As this premise is incorrect, the calculation is meaningless.

Iowa Telecom has established its ATS target rate in accordance with both the Commission's rules and the *Forbearance Order*. Iowa Telecom followed the standard TRP methodology in the calculation of the ATS rate, as shown in Exhibit 12 of Iowa Telecom's Direct Case. The revenue achieved by changing the rate elements included in the ATS calculation was divided by the Local Switching minutes of use and the LEC Transport minutes of use.<sup>159</sup> Thus, Iowa Telecom has set its tariff rates so that they produce an ATS target rate below the FLEC rate determined in Iowa Telecom's cost study, in compliance with the *Forbearance Order*.<sup>160</sup> Accordingly, Iowa Telecom would not recover revenue exceeding its FLEC cost, as Sprint claims, and the Commission should therefore reject the arguments raised in Sprint's Opposition regarding Iowa Telecom's tariffed rates.<sup>161</sup>

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<sup>159</sup> The formula to calculate the ATS rate is as follows:  $((\text{Sum of Sum1 Rows 130, 151, 167 \& 169})/\text{TGT-1 Row 420}) + ((\text{Sum of Sum1 Rows 171, 175, 180, 181, 200, \& 215})/\text{TGT 1 Row 430})$ . For ITNO, the formula is:  $((2,149,520 + 0 + 299,042 + 0)/322,615,118) + ((0 + 2,426,971 + 27,105 + 0 + 471,138 + 0)/411,176,673) = 0.014703981$ . For ITIT, the formula is:  $((2,560,445 + 0 + 327,412 + 0)/416,021,291) + ((0 + 3,051,687 + 55,082 + 0 + 1,430,507 + 0)/590,776,690) = 0.014621797$ .

<sup>160</sup> See Direct Case at 58 n.95 & Exhibit 12. Iowa Telecom acknowledges that it may be required to reset its tariff rates once the Commission sets its FLEC ATS target rate at the conclusion of this proceeding.

<sup>161</sup> Nor would it make sense for the Commission to impose an X-factor on Iowa's ATS rate. An X-factor makes sense when rates are set at current, actual costs. The X-factor is then added to account for productivity increases and inflation going forward. The idea is that rates should not stay the same as the carrier's actual costs drop over the period the rate at issue is in effect. But rates set at FLEC already build in forward-looking technology and, importantly, the technology that will be implemented over the relevant period. Indeed, as explained by Professor Shelanski and as documented in the cost study itself, Iowa Telecom's cost model is based on a network even more technologically advanced than what it will in fact have in place over the rate period. See Shelanski Affidavit at 5; Cost Study at 1. Productivity increases over the rate period are thus already accounted for—indeed are probably overstated—in the cost study. To add an X-factor on top of this would be to double-count productivity increases. There is simply no economic or policy basis for an X-factor in the TELRIC context in general, or for Iowa Telecom's ATS rate in particular.

## VII. CONCLUSION

The Commission should find that Iowa Telecom's forward-looking cost study presents an appropriate basis for establishing its FLEC ATS target rate. In accordance with the *Forbearance Order*, Iowa Telecom's Direct Case presents a forward-looking cost study and supporting documentation that are fully consistent with the Commission's TELRIC methodology. After incorporating the two mathematical adjustments proposed by AT&T, the Commission should approve a FLEC-based ATS target rate of 1.4297 cents per minute to apply from April 9, 2003 through the end of the CALLS agreement on July 1, 2005 or until such later time that the Commission extends the end date for the CALLS rules, if any. If the Commission were to consider adopting any additional corrections to the ATS target rate, it should take an even-handed approach that includes appropriate adjustments that raise the rate.

Respectfully submitted,

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July 21, 2003

## SERVICE LIST

I hereby certify that on this 21st day of July 2003, I caused a copy of the foregoing  
Rebuttal of Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom to be delivered to each  
of the following:

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**Exhibits 13-15 contain confidential information and have been redacted in their entirety.**